



a homeowner consumer.

This MSDS should be supplied to subsequent transporters, shippers, warehouses, retailers or employers where handling, storing or use of this product exceed in quantity, frequency or duration those of a homeowner consumer.

The proportion compositions are given to allow for the various ranges of the components present in the whole product and may not equal 100%.

100.0 %      ORTHO Lawn Insect Spray

#### CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
CHLORPYRIFOS			
Chemical Name: DIETHYL(TRICHLORO-2-PYRIDYL)PHOSPHOROTHIOATE			
CAS2921882	5.3%	0.2 mg/m3	ACGIH TWA
		0.2mg/m3	OSHA PEL
		1 LBS	CERCLA 302.4 RQ
AROMATIC PETROLEUM DERIVATIVE SOLVENT	3.0%		
PETROLEUM DISTILLATE	87.0%		
INERT INGREDIENTS	4.7%		

"Inert Ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act (40 CFR 158.153). It refers to any substance, other than an active ingredient, which is intentionally added to a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

TLV - Threshold Limit Value	TWA - Time Weighted Average
STEL - Short-term Exposure Limit	TPQ - Threshold Planning Quantity
RQ - Reportable Quantity	CPS - CUSA Product Code
CC - Chevron Chemical Company	CAS - Chemical Abstract Service Number

### 3. HAZARDS IDENTIFICATION

#### \*\*\*\*\* EMERGENCY OVERVIEW \*\*\*\*\*

Clear yellow liquid

- HARMFUL IF SWALLOWED

Revision Number: 4	Revision Date: 04/21/93	MSDS Number: 004181
NDA - No Data Available	NA - Not Applicable	

- AVOID CONTACT WITH EYES, SKIN OR CLOTHING
- HARMFUL IF ABSORBED THROUGH THE SKIN
- KEEP OUT OF REACH OF CHILDREN

\*\*\*\*\*

#### **POTENTIAL HEALTH EFFECTS**

##### **EYE:**

This substance is slightly irritating to the eyes and could cause prolonged (days) impairment of your vision. The degree of the injury will depend on the amount of material that gets into the eye and the speed and thoroughness of the first aid treatment.

##### **SKIN:**

This substance is a moderate skin irritant so contact with the skin could cause prolonged (days) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and the speed and thoroughness of the first aid treatment. The dermal toxicity of this substance has not been determined. However, it may be slightly toxic to internal organs if absorbed through the skin. The degree of injury will depend on the amount absorbed. Read the Toxicological Information section (11) of this document for more information.

##### **INGESTION:**

This substance is slightly toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut. Because of the low viscosity of this substance, it can directly enter the lungs if it is swallowed (this is called aspiration). This can occur during the act of swallowing or when vomiting the substance. Once in the lungs, the substance is very difficult to remove and can cause severe injury to the lungs and death. Read the Toxicology Information section (11) of this document for more information.

##### **INHALATION:**

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if inhaled. Read the Toxicological Information section (11) of this document for more information.

##### **SIGNS AND SYMPTOMS OF EXPOSURE:**

**EYE:** May include pain, tears, swelling, redness, and blurred vision.

**SKIN:** May include pain or a feeling of heat, discoloration, swelling, and blistering.

---

#### **4. FIRST AID MEASURES**

---

**EMERGENCY NUMBER (24 hr): (800)457-2022 or (510)233-3737 (International)**

##### **EYE:**

Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. No additional first aid should be necessary. However, if irritation persists, see a doctor.

##### **SKIN:**

If on skin, remove contaminated clothing, wash skin with plenty of soap and water. Wash contaminated clothing before reuse.

##### **INGESTION:**

---

**Revision Number: 4**

**Revision Date: 04/21/93**

**MSDS Number: 004181**

**NDA - No Data Available**

**NA - Not Applicable**

If swallowed, give a large quantity of water to drink, make person vomit and call a doctor. Never give anything by mouth to an unconscious person.

**INHALATION:**

Since this material is not expected to be an immediate inhalation problem, no first aid procedures are required.

**NOTE TO PHYSICIANS:**

Ingestion of this product or subsequent vomiting can result in aspiration of light hydrocarbon liquid which can cause pneumonitis.

This material contains a cholinesterase inhibitor. Measurement of blood cholinesterase activity may be useful in monitoring exposure. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone.

---

**5. FIRE FIGHTING MEASURES**

---

**FLAMMABLE PROPERTIES**

FLASH POINT: 108F

AUTOIGNITION: NDA

FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA

EXTINGUISHING MEDIA:

NDA

**NFPA RATINGS:** Health 2; Flammability 2; Reactivity 0.

**FIRE FIGHTING INSTRUCTIONS:**

Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment, including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.

**COMBUSTION PRODUCTS:**

No data available.

---

**6. ACCIDENTAL RELEASE MEASURES**

---

**CHEMTREC EMERGENCY NUMBER (24 hr):** (800)424-9300 or (202)483-7616

**ACCIDENTAL RELEASE MEASURES:**

Cover spill with a generous amount of Oil Dry, cat litter, clay, rags or other absorbent. Use a stiff broom to mix thoroughly. Sweep up and place in a disposable container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in a disposable container.

---

**7. HANDLING AND STORAGE**

---

Revision Number: 4

Revision Date: 04/21/93

MSDS Number: 004181

NDA - No Data Available

NA - Not Applicable

**HANDLING AND STORAGE:**

IT IS A VIOLATION OF FEDERAL LAW TO USE THIS PRODUCT IN A MANNER INCONSISTENT WITH ITS LABELING. READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH LABEL PRECAUTIONARY STATEMENTS AND DIRECTIONS.

DO NOT USE OR STORE near flame, sparks or hot surfaces. USE ONLY IN WELL VENTILATED AREA. Keep container closed.

Keep pesticide in original container.

Do not put concentrate into food or drink containers. Do not dilute concentrate in food or drink containers.

Do not store diluted spray.

Do not contaminate food or feed.

Keep children and animals away from treated areas until these areas have dried.

Store in a secure, preferably locked, cool dry storage area away from heat, open flame, and direct sunlight.

Do not apply directly to water or wetlands. Do not contaminate water by cleaning of equipment or disposal of waste. For help with any spill, leak, fire or exposure involving this material, call day or night (800) 457-2022.

---

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

---

**PERSONAL PROTECTIVE EQUIPMENT****EYE/FACE PROTECTION:**

Do not get this material in your eyes. Eye contact can be avoided by wearing chemical goggles.

**SKIN PROTECTION:**

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing including gloves.

**RESPIRATORY PROTECTION:**

No special respiratory protection is normally required.

**ENGINEERING CONTROLS:**

Use this material only in well ventilated areas.

---

**9. PHYSICAL AND CHEMICAL PROPERTIES**

---

**PHYSICAL DESCRIPTION:**

Clear yellow liquid

pH: NDA

VAPOR PRESSURE: 12 mm Hg

VAPOR DENSITY

(AIR=1): 3.6

---

**Revision Number: 4****Revision Date: 04/21/93****MSDS Number: 004181****NDA - No Data Available****NA - Not Applicable**

BOILING POINT: 312F  
FREEZING POINT: NDA  
MELTING POINT: -50F  
SOLUBILITY: Miscible in water  
SPECIFIC GRAVITY: 0.87  
DENSITY: NDA  
EVAPORATION RATE: 29 (n Bu Ac = 100)  
PERCENT VOLATILE  
(VOL): 92%

---

## 10. STABILITY AND REACTIVITY

---

### HAZARDOUS DECOMPOSITION PRODUCTS:

Oxides of carbon and nitrogen

### CHEMICAL STABILITY:

Stable.

### CONDITIONS TO AVOID:

No data available.

### INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

### HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

---

## 11. TOXICOLOGICAL INFORMATION

---

### EYE EFFECTS:

Slight irritation clearing in 7 days or less.

### SKIN EFFECTS:

The Draize Skin Primary Irritation Score (range 0-8) for a 24-hour exposure (rabbits) is 3.5. The dermal LD50 in rabbits is greater than 2 g/kg.

### ACUTE ORAL EFFECTS:

The oral LD50 in male rats is 2951 mg/kg. The oral LD50 in female rats is 2132 mg/kg.

### ACUTE INHALATION EFFECTS:

No product toxicology data available. The hazard evaluation was based on data on the components.

### ADDITIONAL TOXICOLOGY INFORMATION:

Rats were exposed for one hour either to vapors of undiluted product or to an aerosol of diluted material. No deaths or signs of toxicity attributable to the test material were observed during exposure or the 14-day observation period.

This product contains an organic phosphorus insecticide which inhibits the enzyme cholinesterase. Signs and symptoms which may be seen, usually within 12 hours following overexposure, may include, but may not be limited to, headache, dizziness, weakness, constriction of the pupil of the eye, blurred or dark vision, excessive salivation or nasal discharge, profuse sweating, abdominal cramps, nausea and vomiting. Incontinence,

unconsciousness and convulsions indicate severe poisoning. In untreated severe poisoning, respiratory depression or cardiac arrest may be fatal. Repeated exposure may result in depletion of cholinesterase. Additional slight exposure may result in signs and symptoms. Note to Physician: Measurement of blood cholinesterase activity may be useful in monitoring exposure. If signs of cholinesterase inhibition appear, atropine sulfate is antidotal. 2-PAM (PROTOPAM) is also antidotal and may be used in conjunction with atropine but should not be used alone. For emergency information, call (510) 233-3737 or (800) 457-2022.

---

## 12. ECOLOGICAL INFORMATION

---

### ECOTOXICITY:

This material is toxic to birds and other wildlife. Highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. This material is toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

### ENVIRONMENTAL FATE:

No data available.

---

## 13. DISPOSAL CONSIDERATIONS

---

### DISPOSAL CONSIDERATIONS:

Partially filled container may be disposed of by securely wrapping original container in several layers of newspaper and discard in trash. Do not reuse empty container. Rinse empty container thoroughly before discarding in trash.

---

## 14. TRANSPORT INFORMATION

---

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g., technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: FLAMMABLE LIQUID, N.O.S.  
DOT HAZARD CLASS: 3 (FLAMMABLE LIQUID)  
DOT IDENTIFICATION NUMBER: UN1993  
DOT PACKING GROUP: III

---

## 15. REGULATORY INFORMATION

---

SARA 311 CATEGORIES:	1. Immediate (Acute) Health Effects:	YES
	2. Delayed (Chronic) Health Effects:	NO
	3. Fire Hazard:	YES

---

Revision Number: 4	Revision Date: 04/21/93	MSDS Number: 004181
NDA - No Data Available	NA - Not Applicable	

4. Sudden Release of Pressure Hazard: NO  
5. Reactivity Hazard: NO

## REGULATORY LISTS SEARCHED:

01=SARA 313	11=NJ RTK	21=TSCA Sect 4(e)
02=MASS RTK	12=CERCLA 302.4	22=TSCA Sect 5(a)(e)(f)
03=NTP Carcinogen	13=MN RTK	23=TSCA Sect 6
04=CA Prop 65-Carcin	14=ACGIH TWA	24=TSCA Sect 12(b)
05=CA Prop 65-Repro Tox	15=ACGIH STEL	25=TSCA Sect 8(a)
06=IARC Group 1	16=ACGIH Calc TLV	26=TSCA Sect 8(d)
07=IARC Group 2A	17=OSHA PEL	28=Canadian WHMIS
08=IARC Group 2B	19=Chevron TWA	29=OSHA CEILING
09=SARA 302/304	20=EPA Carcinogen	30=Chevron STEL
10=PA RTK		

The following components of this material are found on the regulatory lists indicated.

DIETHYL(TRICHLORO-2-PYRIDYL)PHOSPHOROTHIOATE  
is found on lists: 02,12,13,14,17,

---

**16. OTHER INFORMATION**

---

**NFPA RATINGS: Health 2; Flammability 2; Reactivity 0;**

(Least-0, Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

**REVISION STATEMENT:**

This revision updates Section 8 (Personal Protection).

---

\*\*\*\*\*

---

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.